

(19)



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **06240303 A**(43) Date of publication of application: **30 . 08 . 94**

(51) Int. Cl.

**B22F 3/24****B24C 1/10****C22F 1/18**(21) Application number: **05025619**(22) Date of filing: **15 . 02 . 93**(71) Applicant: **FUJI SEISAKUSHO:KK FUJI  
KIHAN:KK**(72) Inventor: **MASE KEIJI  
MIYASAKA YOSHIO****(54) TREATMENT OF SURFACE LAYER OF ALLOY  
POWDER****(57) Abstract:**

**PURPOSE:** To improve the wear resistance and durability of the alloy powder by micronizing the structure close to the surface of the alloy powder to increase the density between green compacts, and reduce the deposition of a binder in the surface layer of the powder.

**CONSTITUTION:** The alloy powder consists of plural various green compacts just like a sintered hard alloy consists of the green compacts of high-hardness WC and

the green compact of Co as the binder. Shots of 40-200 $\mu$ m size having a hardness higher than that of the green compacts are shotted at a high speed of  $\approx$ 50m/sec over the surface of the alloy powder product by shot peening to heat the shotted surface of the alloy powder to a temp. above recrystallization temp. of the binder, hence the surface of the green compact is smoothed by the impact force of the succeeding shots, and the density between the green compacts is increased. The binder is not deposited on the surface of alloy powder even when the powder surface is coated by CVD.

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